BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott	**Chair**
Edward A. Garvey	**Commissioner**
Marshall Johnson	**Commissioner**
LeRoy Koppendrayer	**Commissioner**
Phyllis Reha	**Commissioner**

In the Matter of a Commission Investigation into Qwest's Compliance with Section 271(c)(2)(B) of the Telecommunications Act of 1996; Checklist Items 1, 2, 4, 5, 6, 11, 13 and 14	)))))))	**PUC Docket No. P-421/CI-01-1371 OAH Docket No. 7-2500-14486-2**

QWEST CORPORATION'S

AFFIDAVIT

OF

DENNIS PAPPAS

CHECKLIST ITEMS 2 and 4 – UNBUNDLED LOOPS, SUBLOOPS AND NIDS

August 2, 2002

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AFFIDAVIT

OF

DENNIS PAPPAS

Checklist Items 2 and 4 – Unbundled Loops, Subloops and NIDS

Dennis Pappas states as follows:

My name is Dennis Pappas. My business address is 700 Mineral Ave., Room MNH19.15 Littleton CO. 80120. I am a Director in the Technical Regulatory Group, Local Network Organization at Qwest Corporation ("Qwest").

My work experience, present responsibilities and educational background are contained in Exhibit DP-LOOP-1. I have previously filed testimony before this Commission in the cost docket, PUC Docket No. P-421/CI-01-1375.

I. PURPOSE OF AFFIDAVIT AND IDENTIFICATION OF AFFIDAVIT PORTIONS ADOPTED.

The purpose of this affidavit is to inform the Minnesota Public Utilities Commission and the parties in this docket that f I will be adopting portions of the affidavits of Jean M. Liston on unbundled loops and network interface devices ("NIDs") and the portion of the affidavit of Karen A. Stewart regarding subloops. I am also providing reply testimony to the testimony of the Minnesota CLECs regarding unbundled loops, subloops, and NIDs.

I have read the direct affidavit of Ms. Liston and Ms. Stewart. I am adopting the portions of Ms. Liston's affidavit that address unbundled loops and NIDs. Although I address Ms. Camarota's testimony regarding access to mechanized loop testing ("MLT") as a pre-provisioning or pre-delivery check, Ms. Barbara Brohl is adopting those portions of Ms. Liston's affidavit addressing pre-order loop qualification, and will be providing testimony on the pre-order loop qualification tools that Qwest offers at the hearing. Ms. Stewart is adopting those portions of Ms. Liston's affidavit addressing line splitting and will be addressing that issue at the hearing.

Based on my professional experience, personal knowledge, and information available to me in the normal course of my duties, I am prepared to present Qwest's compliance with these portions of Checklist Items 2 and 4 addressing access to unbundled loops, subloops, and NIDs. I will be prepared to receive any cross-examination appropriate to the portions of the affidavits on unbundled loops, NIDs, and subloops that I am adopting.

II. EXECUTIVE SUMMARY

Qwest complies with the FCC’s requirements regarding access to unbundled loops, subloops, and NIDs. I address each of the issues the various intervenors raise in this docket and demonstrate that Qwest satisfies the requirements of checklist items 2 and 4 as they relate to loops, subloops and NIDs. Specifically, I address the issues raised by Mr. Wilson representing AT&T,

Ms. Camarota and Mr. Grady of Covad, Mr. Price of WorldCom (WCom), and Mr. Burns representing the CLEC Coalition.

My affidavit is organized into three major groupings: unbundled loops, subloops, and finally NIDs.

III. ISSUES RAISED REGARDING QWEST'S COMPLIANCE WITH THE FCC'S REQUIREMENTS FOR LOOPS

a. Standard Loop Provisioning Intervals

The standard unbundled loop provisioning intervals are set forth in Exhibit C to the interconnection agreement between Qwest and FTTH on file with the Commission[1] and in the Qwest Service Interval Guide (SIG). The standard provisioning intervals were the result of a collaborative process in the Regional Oversight Committee (ROC) between Qwest and the CLECs. During the course of the 271 workshops in other jurisdictions, Qwest revised its SIG to reflect state-specific wholesale Service Quality Rules including installation intervals. The most current version of the SIG, which is available to CLECs at www.qwest.com/wholesale/guides/sig/index.html, reflects both the standard intervals and the state specific intervals, including those in Minnesota.

Based on input from all the parties involved in the ROC Technical Advisory Group, TAG, the Performance Indicator Definition (PID) for the Average Installation Interval, OP-4, was established with either a benchmark (for analog,

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[1] The FTTH interconnection agreement was attached to the affidavit of Ms. Karen Stewart as Exhibit KAS-UNES-2. Qwest relies on the FTTH interconnection agreement

non-loaded capable loops and ADSL compatible loops) or parity with Qwest retail service (all other loop types). In this proceeding, AT&T has challenged the interval for DS-1 capable loops, and Covad has challenged the installation interval for loop conditioning.

Installation Interval for DS-1 Capable Loops - AT&T challenges the DS-1 interval as set forth in Exhibit C of the FTTH Agreement and the SIG. The performance measurement requirement for the DS-1 Installation Interval, OP-4, is parity with Qwest retail DS-1 Private Lines. The current standard wholesale interval for DS-1 capable loops is nine days, which mirrors the standard retail installation interval for DS-1 Private Lines. The situation in Minnesota, however, is very different than that portrayed by Mr. Wilson. Both the wholesale and the retail intervals for DS-1 in high-density areas are 5 days for 1 to 8 loops.[2]

The FTTH Agreement also states that state specific rules take precedence. In the course of proceedings on the merger between the former U S WEST Communications, Inc. and Qwest, Qwest agreed to the DS-1 intervals as presented in the current SIG. The following chart identifies the applicable intervals for DS-1 capable loops in Minnesota.

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and the other interconnection agreements filed with this Commission, in addition to the SGAT.

[2] The SIG can be found at **www.qwest.com/wholesale/guides/sig/index.html.**

Number of Loops	High Density	Low Density
1 - 8	5 days	8 days
9 -16	6 days	9 days
17 - 24	7 days	10 days
25 +	ICB	ICB

To determine if Qwest is providing DS-1 installations in parity with retail, one can look at the OP-4 results. The following chart demonstrates that the actual installation interval for DS-1 loops in Zone 1 is shorter than the Qwest retail interval.

Installation Interval OP-4 - DS-1		
MONTH	DS-1 Capable Loop	RETAIL DS-1
March	6.73 days	11.07 days
April	7.36 days	11.85 days
May	7.45 days	12.61 days
June	6.67 days	13.91 days

Clearly, CLECs have been receiving better installation performance than Qwest retail, negating any claim that the current DS-1 loop interval does not afford CLECs a meaningful opportunity to compete. AT&T does not present any evidence regarding the alleged "harm" associated with the existing wholesale intervals for DS-1 loop installation. In fact, AT&T has never ordered a DS-1 capable loop in Minnesota.

AT&T also raises an issue regarding the Minnesota Alternative Form Of Regulation (AFOR). As stated earlier the performance requirement for DS-1 is

parity with retail. Therefore, if the merger commitments were not in place in Minnesota, then the DS-1 installation interval would lengthen and change to mirror the Minnesota retail DS-1 interval. Regardless, AT&T's arguments are inapplicable in Minnesota because if AT&T were to actually order a DS-1 loop in this state, it would receive its requested interval.

Installation Interval for Loop Conditioning – Ms. Camarota on behalf of Covad states that Qwest must reduce the loop conditioning installation interval from 15 business days to 5 days. I am aware of no FCC or Minnesota requirement that Qwest provide loop conditioning in this interval to meet its Section 271 obligations. Moreover, Qwest has already acted to reduce its conditioning interval. For example, in January 2001, Qwest reduced the conditioning interval to the current 15 business days. At that time, Qwest also made a commitment to continue to improve the overall provisioning interval for conditioning.[3] In March 2001, as a result of the Colorado 271 Workshop, Qwest implemented a 2-month xDSL Firm Order Confirmation (FOC) Trial, which included a 72-hour FOC, a pre-survey dispatch and a rapid recovery process to find alternative facilities to provision xDSL services. Ms. Camarota's statement that "as a result of the Colorado trial that Qwest implemented an eleven step paper process"[4] is incorrect. Qwest uses an 11-step assignment process, to

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[3] In response to Covad data request Set 2, Question 70, Qwest provided Covad of an explanation of the conditioning process. Exhibit-DP-LOOP-13 is a copy of that response.

[4] Camarota Affidavit at 12.

obtain compatible facilities. This process includes line and station transfers and the recovery of defective pairs; the entire process is described in the affidavit of Ms. Liston, Exhibit JML-LOOP-13. The Qwest assignment process is the same for retail and wholesale customers.

As part of the Colorado trial, Qwest and CLECs agreed that if the loop was available prior to the due date, Qwest would notify the CLEC and if the CLEC desired to have the loop early, it would be “turned- up” prior to the due date. As a result of the 11-step assignment process, Qwest has been able to provision loops in less than 15 business days because Qwest was able to find alternative facilities that did not require the removal of bridged tap or load coils. If conditioning does not occur, the conditioning charge, if applicable in that state or for that CLEC, would not be assessed. However, if Qwest is not able to find alternative facilities as part of the 11-step assignment process, it must perform loop conditioning to meet the CLEC's request.

Ms. Camarota oversimplifies the process associated with conditioning and provisioning a loop. It is not mostly clerical work. Exhibit JML-LOOP-16 attached to Ms. Liston's direct affidavit displays the process associated with loop conditioning, which includes engineering, construction and provisioning activities. Ms. Camarota ignores that the 15-day conditioning interval also includes activities beyond the actual work of removing the load coils or bridged tap. Specifically, most municipalities and cities have implemented separate rules governing access into manholes where a majority of loop conditioning work is

conducted. Different entities have implemented differing time frames in which notification and approval must be returned from each local municipality or each Department of Transportation prior to initiating the work activity and entering these utility holes. These time frames can be anywhere from a day to 4 or 5 days depending on the individual department and their requirements. If a construction job is required to actually remove load coils or bridged taps, Qwest's process requires 15 business days. This interval is comparable to the intervals observed by Verizon, which has already received 271 approval in several states.[5] In May 2002, the Installation Interval, OP-4, benchmark associated with conditioned loops was discussed during a ROC meeting. Based on the input from all parties, including the CLECs, the benchmark was reduced from 16.5 days down to 15 days. The FCC in its orders approving Verizon's Massachusetts application and the then-Bell Atlantic New York application stated that when benchmarks are established in a collaborative proceeding that involves all interested carriers, those benchmarks are presumed to give carriers a meaningful opportunity to compete.[6] The creation of the PIDs through the ROC

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[5] Information based on Verizon intervals found at: http://www22.verizon.com/wholesale/lsp/bridge/0,2631,4-lib,FF.html#handbooks.

[6] Memorandum Opinion and Order, Application of Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) And Verizon Global Networks Inc., For Authorization to Provide In-*Region, InterLATA Services in Massachusetts*, CC Docket No. 01-9, FCC 01-130 ¶ 13 (rel. Apr. 16, 2001) ("Verizon Massachusetts Order"); Bell Atlantic New York Order ¶ 55 ("At the same time, for functions for which there are no retail analogues, and for which performance benchmarks have been developed with the ongoing participation of affected competitors and the BOC, those standards may well

process was exactly that type of a collaborative process. In fact, Ms. Doberneck, representing Covad, agreed with this position in Colorado.[7] The CLECs' ability to compete is two-fold. First, Qwest commits to provide conditioned loops in less time than the benchmark whenever possible. Second, Qwest does not even perform conditioning for its retail DSL customers. Therefore, CLECs can provision DSL to customers not available to Qwest.

In short, the existing interval is consistent with that of another ILEC that has received 271 approval, and Qwest provides the CLECs with an opportunity to receive the loop early when facilities are available. Covad has presented no evidence to support a modification of this interval and, most important, no evidence that the current interval deprives it of a meaningful opportunity to compete.

Finally, in the ROC TAG, all parties agreed that an average installation interval of 15.0 days for loop conditioning would provide CLECs a meaningful Moreover, in hearings in Colorado, Ms. Megan Doberneck on behalf of Covad agreed that meeting performance standards provided Covad with a meaningful opportunity to compete.[8] Qwest is consistently besting this interval that allows CLECs to compete.

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reflect what competitors in the marketplace feel they need in order to have a meaningful opportunity to compete").

[7] Exhibit DP-LOOP-14, Colorado Transcript excerpt from February 5, 2002.

[8] See DP-Loop-14.

Repair Interval for Analog Loops - AT&T claims that the loop repair interval for analog loops should be shortened from the current 24 hours to 18 hours. AT&T makes reference to the parity definition in the Ameritech Michigan Order[9] and follows it with a discussion regarding the Qwest's retail mean time to restore performance. AT&T fails to note several key factors:

- The FCC has determined that repair services are to be provided to CLECs at parity with analogous retail services. Parity as used by the FCC means that the interval standards will be the same, not something less than the retail interval for the CLECs. For example, in the Bell Atlantic New York Order, the FCC notes:

> We further conclude that Bell Atlantic demonstrates that it is providing maintenance and repair functions for unbundled local loops in substantially the same time and manner in which it provides those functions to its retail customers. …..Rather, we find that Bell Atlantic provides nondiscriminatory maintenance and repair services for the unbundled loops it provides to competing carriers.[10]
>
> The New York Carrier-to-Carrier performance data demonstrate that Bell Atlantic performs maintenance and repair functions with respect to loops provisioned to competitors in substantially the same time and manner that it does with respect to loops provided to its retail customers.[11]

- The MR-3 PID, which measures the percent of troubles cleared in 24 hours is a parity measure that compares Qwest's wholesale

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9 Ameritech Michigan Order, ¶139.

10 Bell Atlantic New York Order ¶ 310.

11 Id. ¶ 311.

performance to its retail performance, as required by the FCC. The parties to the ROC TAG agreed that this would is the performance appropriate standard that allows them a meaningful opportunity to compete. For March through June 2002, the wholesale performance exceeded the retail performance for analog loops. Additionally, the wholesale performance exceeded the Minnesota rules to clear 95% of the repair troubles in 24 hours.

- AT&T attempts to argue that the CLECs need the interval changed to provide them with a meaningful opportunity to compete. However, AT&T does not tell the entire story. AT&T relies on the Qwest's retail mean time to restore performance, but AT&T never discusses the wholesale results. The Mean Time to Restore PID, MR-6, is a parity measure, so Qwest is required to provide service restoration parity. The following chart displays the Minnesota wholesale versus retail mean time to restore performance for analog loops. The data clearly indicates that Qwest's performance provides the CLECs with a meaningful opportunity to compete. In fact for the past four months ending in June of 2002, the CLECs service was restored at least 2.5 hours sooner than the Qwest retail service.

Mean Time to Restore MR-6 - Analog Loops		
MONTH	**CLEC- ANALOG**	**QWEST RETAIL**
March	7 Hrs. 30 Min	10 Hrs. 10 Min
April	5 Hrs. 53 Min	11 Hrs. 20 Min
May	6 Hrs. 33 Min	10 Hrs. 43 Min
June	7 Hrs	17 Hrs. 14 Min

AT&T has not presented any compelling evidence why the repair interval should be shortened. AT&T's claims regarding the so-called tasks it must perform and the time these tasks might take is flawed. Throughout the 271 workshop proceedings, AT&T has never quantified any additional AT&T repair time. For example, AT&T has never presented any evidence regarding time spent performing trouble isolation prior to opening a Qwest repair ticket. Second, Qwest has provided the CLECs with an electronic interface for opening trouble tickets. Therefore, as soon as AT&T issues the trouble ticket, the 24-hour repair clock starts for Qwest. As a result, the difference between the start of the AT&T repair time and the Qwest repair start time is minimal, at best. Furthermore, AT&T's remaining claims regarding the tasks it must perform upon completion of repairs is erroneous. In AT&T's presentation of the "facts," AT&T would close the repair ticket with Qwest, *then* call the customer to ensure that the service is working, and finally close the AT&T repair ticket. This makes no sense. Prior to closing a repair ticket, the CLEC and Qwest typically perform a cooperative test to ensure continuity. Once the facility tests good, then both companies close out the trouble ticket. The Qwest wholesale repair ticket is not closed until the CLEC agrees that the service is repaired. Simple logic suggests that AT&T would not

accept or agree to close a repair ticket until it was sure that the service was working. In essence, the only work remaining for AT&T to conduct is notifying their end user that the trouble has been repaired.

The Minnesota performance results indicate that the wholesale analog repair interval is consistently shorter than the Qwest retail interval and is consistently less than 24 hours. Thus, CLECs have more than enough time to perform any of the repair tasks they must perform within the 24-hour window. Every state commission to consider this issue to date has agreed with Qwest on this issue. Based on the ROC collaborative MR-3 PID Qwest is providing CLECs with the ability to compete, and is in compliance with the FCC requirement of retail parity. Qwest's position has been upheld in every other jurisdiction.

b. Order Rejection Due to Conditioning

Mr. Price representing WCom indicates that "Qwest should not be permitted to reject the CLEC's order based on Qwest's determination that the loop at issue requires conditioning." Mr. Price's concerns are unfounded. All of the references to the Arizona Dialtone agreement cited by Mr. Price are related to the need to condition the loop in order for it to conform to the service type requested by the CLEC.

When a CLEC orders a 2-wire non-loaded loop, Qwest will always attempt to provision the request on existing non-loaded copper facilities. However, if the only available copper facilities are loaded, and the CLEC did not pre-authorize conditioning, Qwest will inform the CLEC that conditioning is necessary. If the

CLEC does not revise the LSR to approve the removal of the load coils, Qwest will not be able to fill the request because the requested 2-wire non-loaded loop does not exist, and the CLEC has not approved the removal of load coils. Additionally, Qwest will remove excessive bridged tap as necessary to ensure the loop meets the ANSI standards of the NC/NCI codes provided by the CLEC. If requested by the CLEC, Qwest will remove additional bridged tap (with the exception of stub cable). This is true for Line Sharing as well.

c. Conditioning Charges for Loops Under 18,000 Feet

Mr. Price also claims that loop-conditioning charges associated with loops under 18,000 feet should not be assessed to the CLECs. Mr. Price bases his claim on the fact the current industry standards require that loops under 18,000 feet are non-loaded. Mr. Price fails to recognize two critical pieces of information.

First, in Minnesota, Qwest does not charge for conditioning based on an agreement between Qwest and the Minnesota Commission. The determination of future conditioning charges will be decided as part of the cost docket.

Second, in the UNE Remand Order the FCC clearly ruled on the cost recovery for conditioning loops less than 18,000 feet:

> We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules,

> the incumbent should be able to charge for conditioning such loops.[12]

Therefore, the FCC authorizes conditioning charges on loops, regardless of length. Additionally, a federal court judge in Colorado held that Qwest has the right to recover costs it incurs to condition loops of less than 18,000 feet.[13] Therefore, both the FCC and a Colorado federal court have ruled that Qwest is entitled to recovery of costs it incurs to condition loops, including costs for conditioning loops that are less than 18,000 feet from the central office.

Mr. Price's reference to the industry standards for loops under 18,000 feet imply that a requirement exists to eliminate load coils on existing short loops. This is not the case. There are no requirements "to bring certain loops into compliance."[14] The FCC did not require ILECs to retrofit their networks. As acknowledged by WCom, Qwest's mass grooming project minimized the number of loops under 18,000 feet that will require conditioning. Additionally, Qwest will conduct additional mass grooming in 2002 involving 25 wire centers and 51 Distribution Areas in Minnesota. The DA selection criteria were arrived at through a mutual decision making process between Qwest and CLECs. Network Disclosure 459, http://www.qwest.com/disclosures/netdisclosure459/deload.html,

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[12] UNE Remand Order at ¶193.

[13] U S WEST Communications, Inc. v. Hix, Civil Action No. 97-D-152 (consolidated), Order at 10 (D.Colo. June 23, 2000).

[14] Price Affidavit at 42.

which is available to CLECs, displays the criteria and the DAs that will be part of this project.

Based on the fact that the FCC has authorized ILECs to recover costs associated with conditioning all loops and Qwest's mass grooming project, Qwest believes that it is appropriate for Qwest to recover its costs for conditioning loops less than 18,000 feet.

d. Conditioning Charge Refund

AT&T also claims that if Qwest is entitled to a separate conditioning charge, then Qwest should refund conditioning charges if the CLEC's end user experience is affected by "Qwest's poor performance causing an end user to abandon the CLEC."[15] For Minnesota, this is a moot point because, as described above, Qwest currently does not charge for conditioning. AT&T has raised this issue in every jurisdiction and has changed its story repeatedly. In the Multi-state proceedings, AT&T recommended SGAT language that would require Qwest to refund conditioning charges under a variety of circumstances, including the loss of the customer. As pointed out by Qwest and the Multi-state Facilitator, the issue of determining fault and what constitutes poor performance from an end user's perspective could prove problematic. The end user's trouble could stem from the type of DSL service or equipment provided by the CLEC and losing a customer could have nothing to do with the way the loop was conditioned. To resolve this issue, the Facilitator recommended a compromise position providing

that Qwest would refund the conditioning charge to the CLEC if Qwest failed to meet a committed due date and the CLEC customer did not connect within 3 months. Additionally, Qwest should provide one-half credit for conditioning under various circumstances described. Although Qwest did not fully agree with the Facilitator's recommendation, it did make the language changes and implemented this policy in all states.[16]

Given AT&T's limited experience with any xDSL loops in Minnesota or elsewhere in Qwest's 14-state region, with or without conditioning, it is highly unlikely that Mr. Wilson's arguments are based on any real experiences that AT&T has faced. Furthermore, Qwest's performance with respect to the quality of its installations for DSL loops is excellent. The New Installation Quality PID, OP-5, measures the number of loops that have a trouble ticket issued against them within the first 30 days following installation. The installation quality for 2-wire non-loaded loops, the predominate loop type that requires conditioning, has been outstanding for the four months ending in June 2002. The following chart displays the OP-5 performance for Minnesota.

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[15] Id.

[16] Exhibit DP-LOOP-16 is a copy of the Multi-state Facilitator's Report on Workshop 3, Group 4, Checklist Items 2, 4, 5, and 6 (Aug. 20, 2001).

New Installation Quality OP-5 – 2-Wire Non-Loaded		
Month	**2-Wire Non-Loaded Loops**	**Qwest Retail**
March	98.70%	95.66%
April	97.25%	97.57%
May	98.41%	97.47%
June	98.40%	96.90%

The OP-5 results for non-loaded loops clearly demonstrate CLECs do not experience the "poor quality" for loop conditioning that AT&T fears.

e. Pre-order Mechanized Loop Testing

Both AT&T and Covad claim to need access to Qwest's Mechanized Loop Testing (MLT) on a pre-order basis. AT&T has argued that it should be allowed full access to MLT to qualify loops for DSL service in the pre-order stages.[17] Ms. Camarota alleges that Covad needs access to MLT because of loop quality concerns.[18] There are several reasons why the request is unfounded on a pre-order basis, many of which are addressed in the Affidavit of Barbara J. Brohl regarding Pre-Order Loop Qualification.

First, AT&T claims to want to use this test for the qualification of xDSL loops. As discussed by Ms. Brohl, an electronic MLT can only be performed on loops with working telephone numbers that are connected to a Qwest switch. Accordingly, for MLTs to be applicable for an unbundled loop, the loop would have to be a conversion of an existing line, referred to as a "Hot Cut". The

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17 Wilson Affidavit at 21.

18 Camarota Affidavit at 7.

number of existing lines that are converted to xDSL lines via “Hot Cuts” is very small. The OP-7, Hot Cut PID indicates that in June there were only 5 non-analog “hot cuts”. In all of 2002, there have been less than 50 non-analog “Hot Cuts”, in Minnesota. In stark contrast, the number of orders for 2-wire non-loaded loops and ISDN capable loops was over 1200 in 2002[19]. Because an electronic MLT applies only in a "hot cut" situation, AT&T’s requested functionality does not have a real life application.

Second, to perform a MLT for an existing customer, AT&T is really asking to access to a customer’s working line -- a customer who is not AT&T's own customer. This testing is not only invasive to the customer, but there are potential issues which arise from accessing the line of another company’s customer since the customer could be a Qwest customer or the customer of another CLEC using Qwest’s switch-based services.

AT&T's demand raises an important fairness issue: an MLT cannot be performed on unbundled loops that Qwest has provided to CLECs. Once the loop is unbundled from the Qwest switch and transferred to the CLEC switch, neither Qwest nor another CLEC would have the ability to perform a Qwest MLT on that loop. An MLT from the Qwest switch also cannot be performed on loops that are part of a facility-based CLEC's own network. Accordingly, if the Commission were to order Qwest to provide the ability for CLECs to perform a pre-order MLT, CLECs would be performing those tests only on Qwest switch-

[19] The number of orders is based on the number of orders as reported in OP-3 for

based loops, UNE-P CLEC lines, and reseller CLEC lines; none of these carriers, however, could perform an MLT on facilities-based CLEC loops or unbundled loops provided to a CLEC.

Third, as Ms. Brohl describes, the MLT provides misleading loop length information. Because the MLT measures resistance on the line, including the end user's customers premises equipment (CPE), the MLT may overestimate loop length by as much as 20 percent. In some instances, a loop that would qualify for advanced services is not qualified when based on the MLT results. Exhibit DP-LOOP-15 is a copy of an Exhibit I presented in a Utah technical conference describing this situation.

Fourth, MLT is primarily a repair test. It is not meant to be, nor was it ever designed to be used as a qualification tool for loops. There are only a limited number of MLT test ports. To the extent that pre-order MLTs were being performed, the ports may not be available for Qwest or CLECs to perform repair tests. This could negatively impact Qwest's ability to quickly test, isolate and repair facilities.

Fifth, as currently deployed in Qwest's network, the MLT functionality requires the CLEC to be the "owner" of the loop. In other words, the CLEC must be identified as the customer of record for that particular telephone number.

Finally, Covad discusses the need for MLT in relationship to testing the quality of the loop. One of the key performance measures that provides insight

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January through June 2002. This number is understates the total number of orders issued because OP-3

to loop quality is the OP-5, New Installation Quality measure. For 2-wire non-loaded loops in Minnesota the OP-5 results provided above indicate that for the past 4 months the CLECs have received excellent service. There simply is no need for a pre-order MLT.

Both Covad and AT&T claim that other ILECs are providing this functionality on a pre-order basis. These statements are misleading. AT&T mentions no BOC that has created the functionality for CLECs to perform an MLT on a pre-order basis themselves. It claims, however, that Verizon performs MLT for CLECs. As described in the Verizon Massachusetts Order, Verizon only performs MLTs on behalf of CLECs as part of its manual loop qualification process if its electronic tools do not return loop make up information.[20] The order does not state that Verizon performs MLTs as a routine replacement to its loop qualification tools, which is what Covad and AT&T appear to be requesting. Moreover, in the Verizon context, the Massachusetts decision makes plain that only 10% of Verizon's loop plant is loaded into its equivalent RLDT. Thus, a vast percentage of loops need a manual review to determine loop qualification. Qwest, on the other hand, has loaded virtually every loop into its RLDT.

Qwest has also learned that Covad's allegation that Verizon is performing pre-order MLT's is inaccurate. Qwest has spoken to a Verizon representative who validated that, as described in the Verizon Massachusetts Order, the only information returned to CLECs is the loop make-up information that would be part

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does not include orders that missed the due date for CLEC reasons

of the electronic loop make-up response. Verizon does not provide CLECs with all the MLT results. Qwest has attempted to obtain information from Covad regarding the pre-order MLT trial that Covad alleges to be having with Verizon. In response to IR 15 on this issue, even though it hails this alleged trial, Covad informed Qwest that it did not have any documentation, such a contract or technical documentation relating to the purported trial or the trial results. As suggested by Covad, Qwest did contact Verizon to obtain information regarding the alleged MLT pre-order trial. A call was placed to the Verizon Line Sharing Project Manager and with the sketchy information provided in the Covad affidavit, he was unable to identify a pre-order MLT trial with Covad. In fact, the only way he could try and find out if a trial with Covad was actually in progress was if Qwest provided additional information from Covad. Qwest has made several attempts to obtain information regarding this alleged trial with Verizon. Covad has not been able to provide <u>any</u> evidence that the trial occurred, and the Verizon representative Qwest contacted was unaware of the activity. Qwest finds itself wondering if this porported trial even took place?

Contrary to Ms. Camarota's allegations regarding Qwest's lack of testing to ensure loop quality for line sharing,[21] Qwest does have a data continuity test process in place, as discussed by Ms. Stewart in her Rebuttal Affidavit.

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[20] Verizon Massachusetts Order ¶ 58.

[21] Camarota Affidavit at 7.

On page 13 of his Affidavit, Mr. Wilson confuses the loading of MLT distance data into the Loop Qualification Database (addressed in Ms. Brohl's Affidavit), with the bulk deload project undertaken by Qwest to remove bridged taps and load coils in certain wire centers, discussed in this affidavit. The two projects were distinct. The bulk deload by distribution area project is part of Qwest's process under Section 273(e)(3) that provides for joint planning efforts between Qwest and CLECs. During this project, Qwest did not perform MLT tests. The loading of MLT distance into the Loop Qualification Database was a completely separate issue that is further addressed by Ms. Brohl.

In summary, the MLT is not a pre-order tool; it is a maintenance and repair tool. Each central office can only accommodate a limited number of MLT tests simultaneously. If a CLEC is performing what they call a pre-order MLT, another provider may be prevented from conducting the test for a repair situation, which is primary purpose of a MLT. The existing OSS functionality for MLT involves a validation that the CLEC that wants to access the customer's account is really the customer of record. MLT is only applicable for Qwest switched services and once the facility is disconnected from the switch, MLT capabilities are lost. An unbundled loop is not a Qwest switched service; therefore, CLECs cannot use Qwest MLT for testing unbundled loops. According to the FCC requirements, Qwest provides CLECs with pre-order loop make-up information. As described by Ms. Brohl the loop make-up data is more robust than Qwest's MLT results. Covad claims to want pre-order MLT to "test" the facilities, yet it appears that

Covad issues orders without using the existing Qwest tools. In an analysis of Covad held orders, Qwest found that the majority of the Covad held orders are for loops that the loop qualification tool clearly identifies could not be filled. It appears Covad is not using the current tools, yet they are demanding the creation of a new tool that is, as presented by Ms. Brohl, not part of the industry loop make-up standards.

The Multi-state Facilitator (and all state commissions participating in the Multi-state proceeding), the Arizona, Colorado, Nebraska, Oregon, and Washington Commissions all agree that Qwest is not required to create the functionality for CLECs to perform MLTs on a pre-order basis.[22] Furthermore, there is no FCC 271 order of which I am aware that requires a BOC to create the functionality for CLECs to perform pre-order MLTs as a requirement of 271 relief. Thus, neither the FCC nor any state commissions to address this issue has agreed with Covad and AT&T.

f. Access to Loops Using IDLC

In the FTTH interconnection agreement, section 9.2.2 2.1, Qwest makes a legally binding agreement to unbundle facilities that are provisioned utilizing integrated digital loop carrier systems when technically feasible to do so. Exhibit JML-LOOP-12 of Ms. Liston's affidavit, displayed the engineering decision

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[22] Exhibit DP-LOOP-16 is a copy of the Multi-state Facilitator's report relating to Checklist Item 4, Exhibit DP-LOOP-17 is a copy of the Colorado Commission's order relating to Checklist Item 4. Exhibit DP-LOOP-18 is a copy of the Washington Commission's order relating to Checklist Item 2. The only two state commissions to

process for unbundling of IDLC. Page 2 of that Exhibit addressed the installation intervals, which are in alignment with the other loop intervals, for the various options as requested by Mr. Burns.[23] Qwest does not charge for the unbundling of IDLC. During the course of the unbundled loop workshops in other jurisdictions, Qwest has agreed to modify the SGAT language to accommodate CLEC requests for a binding agreement regarding the provisioning of loops provisioned by IDLC technology. Section 9.2.2.2.1, of the FTTH Agreement reflects the consensus language:

> 9.2.2.2.1 If Qwest uses Integrated Digital Loop Carrier (IDLC) systems to provide the Local Loop, Qwest will first attempt, to the extent possible, to make alternate arrangements such as Line and Station Transfers (LST), to permit CLEC to obtain a contiguous copper Unbundled Loop. If a LST is not available, Qwest may also seek alternatives such as Integrated Network Access (INA), hair pinning, or placement of a Central Office terminal, to permit CLEC to obtain an Unbundled Loop. If no such facilities are available, Qwest will make every feasible effort to unbundle the IDLC in order to provide the Unbundled Loop for CLEC.

Qwest's internal procedures support this position for all CLECs. Mr. Burns is correct that in Minnesota, approximately 13% of the total number of lines are served by some form of Digital Loop Carrier (DLC) or Integrated DLC (IDLC). As a minor side note, according to Mr. Burns' Exhibit 2 the total percentage of DLC in the St. Cloud exchange is 24% not 31% as presented in his testimony on page 13. Although Mr. Burns correctly calculated the total percent of facilities

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originally order pre-order MLTs (Utah and New Mexico), both of which reversed course and eventually agreed with Qwest.

[23] Burns Affidavit at 20.

provisioned over some form of DLC, what he does not clearly articulate is that the presence of DLC does not impact Qwest's ability to unbundle the facility. In Minnesota, only 7% of the facilities utilize IDLC technology. The mere presence of IDLC does not mean Qwest cannot unbundle the facilities. Rather, it means that Qwest must take some additional steps to unbundle the facilities. Mr. Burns speculates that ISDN loop requests were "rejected" due to the presence of IDLC. However, he presents no real facts or data. Based on Qwest's data out of the Brainerd central office, there are a total of 122 ISDN circuits working today. Of those, 26 circuits, or 21%, are unbundled ISDN capable loops provided to CLECs. Throughout Minnesota, there are a total of 29,227 ISDN circuits provisioned between CLEC Wholesale and Qwest retail customers with approximately 13.7% of those working on either Integrated or Universal DLC. To ensure that unbundled loops are provisioned when IDLC technology is present in the network, Qwest created a dedicated team within the Quality Coordination and Control Center, QCCC, to manage coordinated installation involving these facilities. For first quarter 2002, 97.5% of the coordinated installations that involved IDLC were performed on time. Because he presents no data, Qwest has no further means of responding to Mr. Burns' allegations, except to point out that, as shown above, Qwest is provisioning ISDN capable loops when either DLC or IDLC technology is involved.

On page 29 of his affidavit, Mr. Wilson on behalf of AT&T also addresses IDLC. Notably, AT&T presents no evidence of "problems" AT&T has allegedly

experienced with loops provisioned over IDLC. Nevertheless, Mr. Wilson states: "To try and address this issue [of IDLC], Qwest proposed to make alternative arrangements that are set forth in Section 9.2.2.2.1 of the FTTH Agreement" and suggests that this commitment, which AT&T has agreed to in every other section 271 proceeding, may not be sufficient. In the recent South Dakota 271 proceeding, however, Mr. Wilson stated:

> Specifically, during the course of the workshops, Qwest proposed new SGAT language to § 9.2.2.2.1 and introduced new processes and several exhibits that outline these new processes for provisioning loops that use IDLC technology. In addition, Qwest has altered its position that hair pinning would be limited to 3 loops per central office and agreed to provision more than the three loops per central office on an interim basis. Qwest also stated that a decision will be made to place a Central Office terminal when the number of hair pinned loops exceeds three loops.
>
> With these commitments and Qwest's commitment to revise its technical publications to be consistent with these commitments, AT&T agreed to close this issue.[24]

The language contained in the South Dakota SGAT and the FTTH Agreement is identical. In South Dakota, AT&T wanted it understood that Qwest is obligated to provision loops served by IDLC whenever technically feasible. Qwest's interconnection agreement with FTTH contains this obligation, and Qwest's technical publications, product descriptions and agreement language mandate that Qwest adhere to provisioning of loops which are served via IDLC when technically feasible. The information presented above demonstrates that

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[24] Wilson's South Dakota Affidavit filed March 18, 2002 at 42. (Footnotes omitted).

Qwest meets this commitment. Based on AT&T's assertion in South Dakota and its agreement in other workshops to accept this commitment, Qwest believes AT&T's issue is closed.[25]

The final issue is associated with CLEC access to Qwest maps. Mr. Wilson on behalf of AT&T claims that to determine if it can provide service in areas with IDLC, a CLEC needs access to Qwest's CIMAGE and OSP-FM records.[26] By way of background and to address an issue raised by Mr. Wilson, Qwest's engineering records for loop network elements reside in two systems: CIMAGE and OSP-FM. Both CIMAGE and OSP-FM provide information graphically depicting Outside Plant information such as cable and terminal types, size and locations as well as underground structure information. Both OSP-FM and CIMAGE documents are available to CLECs for viewing. When CLECs review Qwest's facility maps, they are being given access to CIMAGE and/or OSP-FM. The facility information stored in these systems, such as location, type, and terminals is passed to inventory and assignment systems such as LFACS and then to the Loop Qualification database, which provides CLECs with loop make-up information. Thus, the information AT&T seeks is already brought forward in the loop qualification tools Qwest provides.

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[25] Furthermore, Qwest provides a web-based Wire Center Raw Loop Data tool that enables CLECs to obtain information on the presence of IDLC in an entire wire center. See the affidavit of Barbara Brohl. Thus, Qwest provides CLECs the tools to identify in advance areas served by IDLC so that they can determine if or how they wish to serve areas in which IDLC is prevalent.

[26] Wilson Affidavit at 16.

Regardless, CLECs have the ability today to view CIMAGE and OSP-FM documentation. Qwest's PCAT sets forth the procedures for CLECs to view these documents. Specifically, the PCAT for Poles, Ducts, Conduits, and Rights-of-Way contains the OSP Viewing Guidelines. This section of the PCAT can be accessed at the following web address**:** http://www.qwest.com/wholesale/pcat/poleductrow.html. Thus, CLECs have access to these records today**.**

Mr. Burns for the CLEC coalition also raises issues regarding access to exchange maps that display IDLC. First, Mr. Burns states: "it [Qwest] continues to impede CLECs by refusing to provide access to wire center or exchange-level maps which depict the routing of loop facilities."[27] Later in his testimony, Mr. Burns states: "the CLEC Desktop Media, Inc., met with Qwest to view facility records for the Rochester exchange."[28] In fact, Qwest provided maps to Mr. Burns on June 22, 2001, while he was representing U S LINK. This is not a new issue. Ms. Weidenbach responded to this claim in her rebuttal testimony in PUC Docket No. P-421/CI-01-1375.[29] In fact, during one of her many visits to Minnesota, Ms. Weidenbach provided maps not only to Mr. Burns, but also to Dr. Faggerlund representing the Department of Commerce. Ms. Weidenbach's testimony also discussed the number of tools available to the CLEC today to gain

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27 Burns Affidavit at 12.

28 Burns Affidavit at 14.

insight into the wire center and DA specific facility information. First, as discussed above, CLECs do have the ability to review the Qwest plant maps, whether they are paper copies, CIMAGE, or OSP-FM electronic files, at Qwest facilities. Second, the CLECs have real time access to the plant make-up for an entire wire center via the Wire Center Raw Loop Data Tool. CLECs have the ability to download all of the loop make-up for an entire wire center. The data can be downloaded into a data application or Excel spreadsheet so that the CLEC can view and sort the information according to its specific needs. This issue is further addressed in the Affidavit of Ms. Brohl. Finally, CLECs can obtain a copy of the wire center boundary map, which includes DA boundary information down to the street level. The PCATs for Remote Collocation and Field Connection Point (FCP) contain a hot link to the ordering form for the maps. This hot link is contained in the pre-ordering section of these documents found at **http://www.qwest.com/wholesale/pcat/remotecollocation.html** and **http://www.qwest.com/wholesale/pcat/fcp.html**, respectively. Qwest will "burn" a copy of these maps onto a disk and send it to the CLEC.

g. Redesignation of Interoffice Facilities

This issue focuses on the redesignation of interoffice facilities (IOF) when Qwest's exchange facilities in that area are at exhaust. By way of background, the IOF fiber is normally at the center of the cable sheath and is continuously

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[29] Exhibit DP-LOOP-19 is a copy of Ms. Weidenbach Rebuttal testimony. This issue is discussed at page 2.

spliced in an inside concealed compartment or "waffle case" to the next central office or exchange. Therefore, it is not available for redesignation.[30] Meanwhile, exchange fiber is spliced on the outside of the waffle case, drops off, tapers down and is peeled off in manholes between central offices and is not part of the contiguous fibers that go from one central office to another.[31]

Although there is no 271 obligation to redesignate IOF, and most state commissions have refused to impose this requirement, Qwest is willing to make this concession in Minnesota and redesignate IOF when exchange facilities are at exhaust. Conversely, if necessary Qwest will also investigate the redesignation of exchange facilities to IOF, when the IOF is at exhaust. With this concession, Qwest believes that this issue should be considered closed. Qwest is willing to add the following Washington IOF consensus language into the Minnesota SGAT:

> 9.2.14 Qwest will redesignate interoffice facilities (IOF) for CLEC where available, with the exception of interoffice facilities Qwest maintains to ensure sufficient reserve capacity as defined in Section 9.7.2.5. Separate and apart from the foregoing, in the event Qwest removes interoffice service, an entire copper IOF cable that is capable of supporting Telecommunications Services, Qwest will make that facility available as Loop facilities to fill any order currently in the held order queue on a first come, first serve basis. Should additional facilities be available after all held orders are filled, Qwest will make the additional facilities available to fill new orders on a first come, first served basis.

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[30] Washington July 11, 2001 Workshop 4 Tr. at 4407, 4413.

[31] *See* May 25, 2001 Colorado Tr. at 110-14 (discussing identical issue in the Colorado loop workshops).

h. Firm Order Conformation (FOC)

Ms. Camarota raises several concerns regarding the 72-hour FOC. First, to assist this Commission, I would like to present the facts regarding FOCs and unbundled loops.

1. The performance metric, PO-5, measures the percent of FOCs delivered on time. During the ROC TAG meetings, Qwest and CLECs agreed that the benchmark for unbundled loops would be 90% of the FOCs delivered within 24 hours.
2. As Exhibit NC-2 of Ms. Camarota's testimony indicates, Qwest entered into an agreement with Covad to deliver FOCs for analog loops in 48 hours. For xDSL capable, ISDN capable and DS-1 capable loops, the FOC interval was 72 hours. This agreement[32] with Covad was negotiated as a part of the agreements established between Qwest and the CLECs during the U S WEST / Qwest merger.
3. All CLECs providing xDSL and DS-1 capable loops were able to "opt" into a 72-hour FOC agreement with Qwest. North Point, New Edge, Rhythms and Sprints all added a 72-hour FOC commitment to their interconnection agreements for these loop types.[33] The 24-hour FOC remained in place for all other loop types. This was a more stringent

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[32] Exhibit DP-LOOP-20 is a copy of the Qwest – Covad merger agreement.

[33] Qwest witness Ms. Kathleen Lucero describes this in greater detail in her Minnesota Docket No. P-421/C-02-197 testimony filed on April 22, 2002, pages 5 and 6.

requirement than the Covad 48-hour requirement, so Qwest continued to provide Covad analog FOCs in 24 hours.

4. In October 2000, Qwest implemented the 72-hour FOC process for Covad and the other 4 CLECs. Ms. Camarota, Exhibit NC-4, provides an excerpt of Mr. Ken Beck's May 1, 2002 testimony from Minnesota Docket No. P-421/C-02-197. On page 150, line 15 through line 17, Mr. Beck refers to this implementation as a trial. In actuality, it was the implementation of the merger agreements between Qwest and the CLECs. All CLECs purchasing xDSL and DS-1 capable loops had the option to add the 72-hour FOC to their interconnection agreements, and in October 2000 over 86% of all the xDSL loops in Minnesota were receiving the 72-hour xDSL FOC.[34]

5. During the Colorado 271 Emerging Services workshop in November 2000, the FOC issue surfaced with CLECs requesting a more "meaningful" FOC. CLECs complained that Qwest often sent out an initial FOC followed by a meaningful FOC.[35] With a few months of experience implementing the 72-hour FOC for the DLECs discussed above, Qwest proposed a statewide trial of a 72-hour xDSL FOC in Colorado. The statewide trail included a mechanized issuance of the

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[34] Id. at 6.

[35] CO 11/2/00 Tr. at 163 (Cutcher) ("Our expection is, once we get an FOC, that is when the loop will be delivered").

FOC and involved all CLECs providing xDSL service in Colorado for all xDSL loop orders issued during the 2 months.

6. After much workshop discussion, the CLECs participating in the Colorado 271 proceeding agreed to participate in a Colorado xDSL FOC trial. Qwest also provided notice to all CLECs in Colorado ordering xDSL loops with an opportunity to opt out of the trial. No CLEC opted out of the trial.

7. The Colorado xDSL Trial occurred in March and April of 2001 and remained as part of the provisioning process in Colorado. In addition to utilizing a 72-hour FOC Qwest agreed to perform a pre-survey of the facilities if necessary.[36] The pre-survey involves dispatching a technician prior to the due date but after the FOC. To avoid the possibility of double dispatching, Qwest asked if CLECs would be willing to accept the loop early if the pre-survey resulted in the technician being able to provision the requested service. CLECs agreed that if Qwest called, and the CLEC approved the early delivery of the loop, then the order could be completed early. The trial demonstrated that in April Qwest was able to deliver 97.7% of the xDSL FOCs within 72 hours, that the requested due date was met 97.5% of the time, and the installation interval was, on average, 11.6

[36] Exhibit DP-LOOP-22 is an excerpt from the February 21, 2001 Colorado transcript where the differences between the Covad pre-survey and the trial pre-survey was discussed.

days for loops requiring conditioning and 5 days for all other xDSL loops**.** Exhibit DP--LOOP-2 is a copy of the results of the Colorado trial.

8. As a result of the trial, the Colorado workshop participants agreed to implement the 72 FOC for all xDSL and DS-1 capable loops. Qwest and CLECs reached the same agreement in all states. Qwest agreed to bring this issue before the ROC TAG and to officially change the PO-5 performance measures for these loop types. The ROC TAG approved the change; Qwest implemented the necessary system changes in March 2002, at which time the 72 hour FOC for all xDSL loops and DS-1 capable loops was implemented for all CLECs in all states.

Ms. Camarota alleges that Qwest "failed, or worse, refused, to live up to that commitment",[37] namely the 72-hour FOC in the Covad agreement. Ms. Camarota's interpretation of Mr. Beck's testimony is wrong. As mentioned above, the October 2000 implementation of the 72-hour FOC was the implementation of all Merger Agreements, including Covad's agreement. Confidential Exhibit DP-LOOP-C3 is a copy of Qwest's internal methods and procedures that support the 72-hour FOC. Covad is the only CLEC whose Merger Agreement includes a pre-survey prior to the FOC.

Finally, this agreement with Covad was anything but a "secret deal." Confidential Exhibit DP-LOOP-3C clearly identifies the different pre-survey process for Covad. In December 2000 and February 2001 Colorado workshops, Covad and Qwest openly discussed on the record before all parties, the pre-survey provision in the Covad agreement. Qwest informed the parties that it wanted to issue an FOC before the pre-survey to see whether it could meet CLEC expectations without the need for performing a double dispatch. The parties agreed to utilize this process in the Colorado xDSL trial. Both the Covad Merger agreement and existing 72-hour process only apply to unbundled loops, it does not apply to Line Sharing. Ms. Notarianni will address Ms. Camarota's concern regarding multiple FOCs. As previously mentioned, the performance results clearly demonstrate that Qwest delivers quality loops to Covad in a timely manner. As the PO-15 data in Mike Williams' testimony shows, a vast percentage of the time when the due date changes for xDSL FOC loops, the due date stays the same or is moved forward. This conforms with the testimony above wherein CLECs agreed that they were prepared to accept loops early in order to "avoid the possibility of double dispatching." The net effect is to get CLECs these loops early. The 2-wire non-loaded loop represents approximately 60% of the xDSL loops in service in Minnesota. The average provisioning interval (OP4) for the 2-wire non-loaded loops in zone 1, over the last four months – bears this out. During this time, the average interval ranges from 3.96

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[37] Camarota Affidavit at 12.

days to 4.12 days, less than the shortest interval of 5 days. Ms. Camarota's concerns regarding the FOC, is nothing but a smoke screen and should be dismissed.

i. Loop Quality

Covad raised concerns regarding the quality of loops delivered by Qwest. The concerns raised by Ms. Camarota can be grouped into three separate issues. However, not all of them really relate to loop quality. Additionally, AT&T raises a question regarding the coordination of unbundled loop installations and local number portability (LNP).

- Physical Verification of Loops – Ms. Camarota alleges that as a result of the Colorado xDSL that Qwest introduced "an eleven step paper process".[38] However, Ms. Camarota misrepresents the events associated with the Colorado xDSL Trial that was conducted during 2001. It is true that during the trial, Qwest explained the 11-step provisioning process associated with assigning facilities to match the CLEC's loop request. Contrary to her testimony, however, this was not a new process associated with the trial. The 11-step assignment process has always been a part of Qwest's retail and wholesale provisioning process. This process, which is the same for retail and wholesale, includes a review process to find compatible facilities, such

[38] Id. at 12.

as a line and station transfer or the recovery of defective pairs. Ms. Camarota is correct, however, that the trial did not include a physical facility verification prior to the FOC. However with the trial, Qwest did implement a rapid recovery and a pre-survey activity that occurred after the issuance of an FOC. As discussed during the trial planning phase, a pre-survey prior to the FOC resulted in a double dispatch. The approach in the trial, and ultimately in Qwest's current policy, establishes a field verification prior to the due date so that if problems are identified, they can be fixed. CLECs, through the workshop process, also agreed that if no problems were identified, Qwest could turn up the loop early with the CLEC's permission. Focusing on the primary loop type Covad purchases, the 2-wire non-loaded loop, the percent of due dates met, OP-3, in Minnesota for March through June 2002, has been over 99% in Zone 1. The Zone 2 results have consistently exceeded 95% with 3 months being at 100%. The standard interval for a 2-wire non-loaded loop is 5 days and the benchmark for the installation interval, OP-4, is 6 days. For the past four months in Zone 1 and Zone 2 the installation interval has been under 5 days, except for one instance in Zone 2. This data would indicate that Qwest is making the loops available on the pre-survey prior to the due date.

- Contrary to Ms. Camarota's speculation, Qwest does perform a physical pre-survey for new loops. This pre-survey occurs after the issuance of the FOC. The benefits of this pre-survey process were documented in Trade Secret Exhibit 4.1 in my rebuttal testimony submitted on April 18, 2002 in PUC Docket No. P-421/CI-01-1375, which is attached as Exhibit DP-LOOP-C4. That exhibit demonstrates that Qwest in most situations was able to turn up Covad's loops early, and Covad accepted those early orders.

- Cooperative Testing – The primary purpose of a cooperative test is to perform end to end testing with the CLEC. This end-to-end testing includes not only the Qwest portion of the network, but also those network components belonging to the CLEC. Because an unbundled loop is connected through the CLEC's switch, Qwest can not perform an end-to-end test alone; Qwest only has the ability to test the loop portion of the circuit. Qwest's provisioning options give CLECs two choices in which to take advantage of cooperative testing. The first is basic installation with cooperative testing, and the second is coordinated installation with cooperative testing. Basic installation with cooperative testing can be ordered when the "lift and lay" procedure does not require coordination, but the CLEC wants to test the entire circuit end-to-end. In many instances today, CLECs are relying on

self-provisioning of customer premises equipment ("CPE") by the end user and do not send a technician to the end user's premises. Cooperative testing allows the CLEC the opportunity to use the Qwest technician at the end user's premises to conduct a cooperative test thereby validating that the entire circuit, including CLEC network components, has continuity to that location.

Coordinated installation with cooperative testing enables the CLEC to specify a specific time that it wants the lift and lay procedure to occur. Once again, the CLEC has the ability to test cooperatively with Qwest. In fact, Qwest performs cooperative testing at the direction and discretion of the CLEC. With this cooperative testing, the CLEC is able to validate continuity of the "entire" circuit – from its central office to the end user's premises. The cost of cooperative testing is not one to be decided in this docket, but rather the Minnesota cost docket. To the extent that Qwest incurs costs to perform this test, Qwest believes it should be allowed to recover those costs.

Ms. Camarota claims that Covad has concerns regarding the quality of the loops provided by Qwest, but never offers or provides any evidence that a problem actually exists. None of the above issues address the quality of the loop.

In PUC Docket No. P-421/CI-01-1375, the Cost Docket, I presented information regarding cooperative testing.[39] First, the percent of Coordinated Installations performed on Time measure, OP-13, evaluates whether Qwest performed a coordinated installation on time and within a specified time limit. The agreed upon benchmark for this measure is 95%. AT&T, Covad, and other CLECs participating in the ROC process agreed to this benchmark with the understanding that if Qwest met the 95% benchmark, CLECs would be given a meaningful opportunity to compete. Qwest continues to exceed that benchmark in Minnesota.

It is important to note that Covad uses the coordinated installation option for all of its loop installations. If Qwest's loops were consistently of a poor quality, and it was only detected when the service was "turned-up," one would expect to see a large percent of OP-13 misses. Confidential Exhibit DP-LOOP-C5 displays the Covad specific OP-13 results for Minnesota and clearly indicates that Covad's installations were completed on time. The following chart displays the outstanding OP-13 results for both analog and all other loop types for the state of Minnesota.

Coordinated Installations On Time OP-13		
Month	**Analog**	**All Other**
March	99.19%	100%
April	99.18%	95.04%
May	99.86%	98.08%

[39] Confidential Exhibit DP-LOOP-C3 is a copy of Exhibit DP-4.1 from my Rebuttal testimony filed on April 18, 2002.

June	98.87%	97.64%

Clearly, Qwest is providing high-quality loops in a timely fashion.

The next measure of quality is the New Service Installation Quality PID, OP-5. OP-5 measures the number of new loops that had a trouble ticket issued within the first 30 days of service. Confidential Exhibit DP-LOOP-C6 displays the Covad Minnesota results for both the 2-wire non-loaded loop and the ISDN capable loop. Again, as this exhibit demonstrates, Qwest is delivering quality loops to Covad. The following chart displays the Minnesota results for the analog and 2-wire non-loaded loop, which combined represent 96% of the Minnesota loops in service

Installation Quality OP-5 Analog and 2-Wire Non-Loaded				
	Analog		**2 Wire Non-Loaded**	
Month	**CLEC**	**Qwest Retail**	**CLEC**	**Qwest Retail**
March	97.99%	60.36%	98.7%	95.66%
April	97.49%	59.54%	97.25%	97.57%
May	97.79%	58.27%	98.41%	97.45%
June	96.90%	56.12%	98.40%	96.90%

Covad has not produced any evidence to demonstrate its allegations regarding the quality of loops in Minnesota. In contrast, the results noted above clearly demonstrate that Qwest continues to provision over 95% of these loops without trouble. The Qwest audited performance data demonstrates that Qwest is providing quality loops to all CLECs, including Covad, in Minnesota.

In response to Mr. Wilson's testimony regarding coordination of unbundled loops with number portability, Qwest has processes in place to coordinate the activities associated with unbundled loop and Local Number Portability (LNP) conversions. The Qwest performance for the conversion of existing customers is reflected in the "Hot Cut", OP-7 performance measure. OP-7 measures the time it takes Qwest to actually transfer a customer from Qwest to the CLEC. During the time it takes Qwest to "lift" the facilities off of the Qwest central office equipment, and then "lay" the facilities on the CLEC equipment, the end user customer is out of service. In Minnesota, for analog loops, the average "lift and lay" time has averaged between 3 and 4 minutes, which exceeds the "hot cut" performance of some ILECs that have received FCC 271 approval[40]. Additionally, Qwest continues to exceed the 95% benchmark set for loop with number portability, or OP-8(b). Mr. Williams will discuss these results in greater detail in his reply testimony.

	Loop with Number Portability	
Month	**Benchmark**	**CLEC Results**
March	95%	100%
April	95%	100%
May	95%	96.12%
June	95%	99.52%

[40] Bell Atlantic / New York. FCC 99-404 at pages 152 – 153 footnote 925.

j. Repeat Trouble Rate

Mr. Grady representing Covad raises concerns associated with the Repeat Trouble Report's for unbundled loops and Line Sharing. I will address the unbundled loop issue, and Ms. Stewart, in her affidavit, will address the issues associated with Line Sharing. Qwest has worked very closely with Covad to address concerns around performance. During 2001, the Qwest Account Manager assigned to the Covad account conducted weekly meetings with Covad to work through Covad's concerns and problems as they surfaced. The weekly meetings, which started in 1999 primarily focused on unbundled loop issues and then shifted to Line Sharing issues as Covad's emphasis shifted to line sharing. These meetings lasted anywhere from 1 to 2 hours. During these sessions Qwest worked diligently to improve its processes and the service it delivered to Covad. The parties created action item lists and tracked the status during subsequent weekly meetings. By the end of 2001, the meetings became shorter in duration. Covad praised Qwest on the progress it was making and indicated that their issues were diminishing. In fact, Minda Cutcher – VP of ILEC relations who represented Covad during many of these meeting, suggested that because of the progress that was being made, the need to continue with the weekly meeting was no longer necessary. The meeting schedule changed to every other week in 2002. Not only are the current meetings less frequent, but the duration of each meeting has also been reduced. In many situations, the meetings only last about 30 minutes.

Qwest and Covad have discussed Covad's claims regarding repeat troubles. However, investigating the claims has not been easy. When Qwest asked for specific order examples, Covad provided the Covad Circuit ID and the Covad trouble tracking number, not the related Qwest data. For instance, when a CLEC opens a trouble ticket, Qwest assigns a trouble ticket number and the repair information is stored either by the telephone number or circuit id. For unbundled loops, the Circuit ID is used because Qwest does not have a telephone number assigned to the loop. Covad would not supply Qwest with the Qwest circuit id for unbundled loops or the telephone number for Line Sharing investigations. Therefore, Qwest could not investigate Covad's claims using the Covad information, and Covad would not assist Qwest, claiming that Qwest should be able to "find" the information from its own records. This pattern has been repeated numerous times during this "joint" undertaking. In fact, Mr. Grady's confidential Exhibit JG-4, is typical of the pattern. The Exhibit contains Covad's Circuit ID; therefore, Qwest could not access its records to verify or deny Mr. Grady's claims. Additionally, Confidential Exhibit JG-4 does not indicate if the circuits are all in Minnesota, if it is unbundled loops, or Line Sharing, or when the problem occurred. Qwest is not alone in its frustration to resolve Covad's complaints. During the data reconciliation process in Arizona, Liberty Consulting encountered the same problem. The Liberty report stated: "… Covad could not

produce data with a common field, which would be necessary to permit reconciliation of the M&R measures."[41]

Confidential Exhibit JG-1 of Mr. Grady's affidavit is a copy of the Covad specific performance results, which displays one year of data. Additionally, Mr. Grady's high-level summary of the data includes references to data points that are 9 months old. The FCC in reviewing performance for 271 applications relies on 4 months of data. Covad, at the end of December 2001, indicated that Qwest's performance had improved, and many of Covad's issues and concerns had been resolved. Looking at the relevant 4 months of 2002 data displayed in confidential Exhibit JG-1, the picture is far different from the one painted by Mr. Grady. During all 4 months of 2002, there was only 1 repeat trouble report for 2-wire non-loaded loops. Contrary to Mr. Grady's claims, Qwest's performance has significantly improved and is reflected in the results.

Confidential Exhibit JG-1 of Mr. Grady's testimony displays Qwest's Repeat Trouble Rate performance (MR-7). The second issue raised by Mr. Grady focuses on the allegation that Qwest incorrectly bills for its services when the status of the work was No Trouble Found, NTF. Qwest reports Repair Report information in two different formats. MR-7 reflects all trouble tickets and MR-7* removes the trouble tickets associated with NTF. In Minnesota for March

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[41] Liberty Report for Arizona, Dec. 3, 2001 at page 16.

through May 2002,[42] for the 2-wire non-loaded loop, the number of trouble tickets reviewed for MR-7* is only one less then it was for MR-7, thus indicating that one of the repair ticket in 3 months was coded as NTF. For ISDN loops, the same situation occurs the MR-7* data; there is only 1 less ticket over the three-month period. In other words over a 3-month period, for the 2-wire non-loaded and ISDN Capable loops there were only 2 reported instances, of NTF**.** Confidential Exhibit DP-LOOP-C7 is a copy of the Covad MR-7 and MR-7* performance results for the 2-wire non-loaded and ISDN loops.

Finally, Mr. Grady discusses billing issues associated with NTF. Based on the information Mr. Grady provided in Confidential Exhibit JG-3a, Qwest was able to review the repair history for the four circuits. Confidential Exhibit DP-LOOP-C8 is a modified version of Exhibit JG-3a. The modification is the addition of a new column of information displaying Qwest's findings. In two of the four cases presented by Covad, billing for trouble isolation was warranted.

- **Circuit 1 – Covad Trouble Ticket #399327** - Qwest billed Covad because the repair ticket was closed as No Trouble Found at the end user's demarcation point. Further investigation into the incident reveals that the Covad circuit actually came clear while testing with both companies' employees. If the ticket had been closed in that manner, billing for the

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[42] The performance measures associated with a *, such as MR-7* are reported one month in arrears. Therefore, June MR-7* results are not yet available.

original dispatch would not have occurred. Qwest's records do not indicate that Covad has raised a billing question regarding this trouble ticket.

- **Circuit 2 – Covad Trouble Ticket #406506** - Qwest billed Covad because Qwest had already dispatched a technician to the end user's premises by the time Covad called to cancel the trouble ticket. Since Qwest had dispatched a technician and NTF was reported, Covad was billed for the dispatch.
- **Circuit 3 – Covad Trouble Ticket #385581** - Qwest billed Covad because the initial trouble report resulted in Qwest finding trouble on Covad's side of the demarcation point at this apartment complex. In Exhibit JG-3a, Covad is contending that Qwest pulled the fuse protector at the IT feed. However, Qwest shows no documentation indicating that the fuse was pulled. Of the 8,000 repair tickets I was dispatched on, I never removed and left the fuses out of the loop due to National Electrical Code Standards. The technician should have notified the CLEC, which he did, stating that the trouble had been isolated into the end user's premises, and then allow the CLEC to resolve the issue with that end user. The documentation Covad presents does not support its claim that Qwest pulled the protector fuse and left it unplugged. The "usual" test is to pulled the jumper or bridge clips off of the block and test the inside wiring without the presence of dial tone.
- **Circuit 4 – Covad Trouble Ticket #443131** - Qwest billed Covad because at the time, the trouble appeared to be in the CLEC's central office card. Upon isolating to that point, the ticket was cleared accordingly, and the CLEC was

billed. The following day, a new trouble report was issued, and Qwest found trouble on the distribution or F2 facilities. Qwest assigned a new F2 and cleared the trouble back to the CLEC. Once again, during the time when I was working as an I&M Technician, very seldom was the same technician dispatched back onto a case of trouble they were on the day before just due to routing and load considerations. A technician finding facilities problems on a repeat dispatch will have notes to go from on what occurred the day before, but may not associate the two events.

Throughout his affidavit Mr. Grady alleges that Covad is experiencing a high volume of repair problems. Interestingly, Mr. Grady does not provide the Covad confidential performance data that displays the overall trouble rate by loop type. PID MR-8, the Trouble Rate, indicates the percentage of loops that experienced trouble in that month. This performance result compares the number of trouble tickets against the number of loops in service by loop type. Confidential Exhibit DP-LOOP-C9 is a copy of the Covad MR-8 results for 2-wire non-loaded loops and ISDN loops. For March through June 2002, the Minnesota state results indicate that, the trouble rate for 2-wire non-loaded loops was at parity with retail, and the results ranged from 0.37% to 0.64%. For the ISDN loops it inched over the 1% mark in 2 months. In the other two months it was under 1%. The MR-8 data clearly demonstrates that Covad has exaggerated the size of the problem. The MR-8 measure for ISDN has been out of parity for CLECs, but this is largely the result of the limited number of events on a small

sample size. The FCC has recognized that performance results may be skewed by low volumes and has taken those low volumes into account when evaluating performance results.

Covad's concerns regarding repair should be dismissed. The current 2002 performance results do not support the Covad allegations.

k. Spectrum Management Issues

AT&T raises three issues regarding Spectrum Management: (1) the uses of the industry standard Power Spectrum Density (PSD) NC/NCI codes, (2) the placement of T1s and (3) remote deployment of Qwest's DSL facilities. It is interesting to note that AT&T raised concerns with these three issues, however, less than 2 months ago, in South Dakota, AT&T did not raise any Spectrum Management concerns.

Spectrum NC/NCI Codes –

Both AT&T and WCom raise concerns regarding the use of the industry standard spectrum NC/NCI codes. Mr. Price accurately portrays the September 14, 2001 ex-parte the Network Reliability and Interoperability Council (NRIC) submitted to the FCC.[43] As presented by Mr. Price, "Qwest is on record as having 'accepted' this recommendation to the FCC."[44] At this point in time, the FCC has not accepted the "recommendation" of NRIC to eliminate the use of the

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[43] Price Affidavit at 41.

spectrum NC/NCI codes, nor has the FCC rescinded rule 51.231 (a)(3), (b) and (c). Specifically, these FCC rules state: "A requesting carrier that seeks access to a loop or a high frequency portion of a loop to provide advanced services ***must provide*** to the incumbent LEC information on the type of technology that the requesting carrier seeks to deploy."[45]

If the FCC changes these rules, Qwest agrees to abide by any future FCC requirements regarding the spectrum management, including changes to the required spectrum NC/NCI codes.

Treatment of T1s

Mr. Wilson raises an issue regarding the disposition of T1s. The FCC has recognized T1s as "known disturbers"; however, Mr. Wilson's depiction of the FCC rules is somewhat misleading.

The FCC has repeatedly recognized that there are competing goals between maximizing non-interference *and* avoiding disruption of existing customer service. For example, in its March 1999 *First Advanced Services Order*, the FCC articulated these competing goals as follows:

> Interfering technologies may include existing technologies, such as AMI T1, which have already been widely deployed in incumbent networks, or future technologies, the effects of which are not yet known. These technologies may cause significant interference with other services deployed in the network. Newer technologies may be able to provide the end user with the same amount of bandwidth while causing less interference with other services . . . Transitioning customers to less interfering

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[44] Id. at 41.

[45] *See* C.F.R. §51.231(b) (emphasis added).

> technologies, however, may disrupt service for subscribers. Thus, there are competing goals of maximizing noninterference between technologies and not interfering with subscribers' existing services.[46]

The current Qwest engineering practices include the use of High bit-rate Digital Subscriber Line, HDSL, a technology recognized and approved by the T1E1, the spectrum management technical advisory group. The Qwest network architecture is designed to minimize the potential interference associated with T1 technology. The Qwest engineering practice segregates T1s, wherever possible, within the cable sheath and places them in binder groups located on the outside of a cable. This placement reduces the potential of interference with other services within adjacent binder groups.

AT&T claims that Section 9.2.6.4 is the only section of the FTTH agreement that addresses this issue. That is patently untrue. The manner in which interference problems are handled, regardless of the carrier, are also addressed in Section 9.2.6.5 which states:

> If either Qwest or CLEC claims a service is significantly degrading the performance of other advanced services or traditional voice band services, then that Party must notify the causing carrier and allow the causing carrier a reasonable opportunity to correct the problem. Upon notification, the causing carrier shall promptly take action to bring its facilities/technology into compliance with industry standards. Upon request, within forty-eight (48) hours, Qwest will provide CLEC with binder group information including cable, pair, carrier and PSD class to allow

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[46] First Report and Order and Further Notice of Proposed Rulemaking, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, 14 FCC Rcd 4761 ¶ 87 n. 199 (1999) ("*First Advanced Services Order*").

CLEC to notify the causing carrier.

Qwest currently has several hundred thousand ADSL and HDSL circuits working in its 14 state region. With all of these up and working in the Qwest network, there have been no significant issues that have arisen because of the proximity of these two technologies. To date, no CLEC in any of the states across Qwest's region has identified a T1 as a disturber, nor has Qwest been requested by a CLEC to remove or "change out" a T1 because it was causing interference. AT&T, a CLEC that does not provide DSL using the Qwest network, is the only party to raise this issue. Tellingly, it presents no evidence whatsoever of alleged "problems" AT&T has experienced in Minnesota or elsewhere.

The current language in the FTTH agreement was recommended by the Facilitator in the Multi-state proceedings to solidify Qwest's obligation to manage T1s and potential interference problems. Virtually all states have adopted similar language for managing T1s.

Placement of Qwest's Remote DSL Equipment –

AT&T raises the issue of Qwest's placement of Remote DSL equipment.[47] However, once again, Mr. Wilson does not provide any evidence that a problem exists.

As of June 27, 2002 Qwest has over 250 Remote DSLAMS deployed in Minnesota. This information is contained in Network Disclosure, Number 459,

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[47] Wilson Checklist Items 4 and 11 Affidavit at 34.

which is accessible to CLECs and includes information regarding the location of the Remote DSLAMS. Additionally, the current equipment and deployment practices are in according with industry standards, such as New Equipment Building Standards 1 (NEBS-1), and are similar to the practices of other ILECs throughout the country. To date, no CLEC has complained of interference associated with this equipment. However, on the remote chance that a problem should occur Section 9.2.6.9 of the Minnesota SGAT states:

> Where CLEC demonstrates to Qwest that it has deployed central office based DSL services serving a reasonably defined area, it shall be entitled to require Qwest to take appropriate measures to mitigate the demonstrable adverse effects on such service that arise from Qwest's use of repeaters or remotely deployed DSL service in that area. It shall be presumed that the costs of such mitigation will not be chargeable to any CLEC or to any other customer; however, Qwest shall have the right to rebut this presumption, which it may do by demonstrating to the Commission by a preponderance of the evidence that the incremental costs of mitigation would be sufficient to cause a substantial effect upon other customers (including but not limited to CLECs securing UNEs) if charged to them. Upon such a showing, the Commission may determine how to apportion responsibility for those costs, including, but not limited to CLECs taking services under this SGAT.

Contrary to Mr. Wilson's assertions, the FCC does not classify Remote DSL equipment as a known disturber, nor does the FCC imply that the recommendation for the treatment of T1s also applies to Remote DSLs. Finally, the deployment of this equipment in no way can be viewed as anti-competitive and contrary to Section 706 of the Act.[48] Like Qwest, CLECs can install Remote

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[48] Id. at 34.

DSL equipment to serve their end user customers. Mr. Wilson provides no evidence for his alleged "concerns" because no evidence exists.

Qwest's treatment of spectrum issues is in full compliance with the current FCC requirements. To the extent that the FCC rules change, Qwest will comply with the new rules.

I. Volumes

Qwest has provided numerous Minnesota CLECs with significant quantities of unbundled loops. As of May 31, 2002, Qwest had provided 27 CLECs with 84,231 unbundled loops in service in Minnesota. Specifically, Minnesota CLECs had in service from Qwest 76,585 2-wire voice grade/analog loops, 6,717 xDSL capable loops[49] and 927 high-capacity loops.[50] Throughout its 14-state territory, Qwest had 383,104 unbundled loops in service as of the end of May 2002. Of this regional total, 322,845 were 2-wire or 4-wire analog/voice grade loops, 53,155 were xDSL capable loops, and 7,144 were high capacity loops.

IV. ISSUES RAISED REGARDING QWEST'S COMPLIANCE WITH THE FCC'S REQUIREMENTS FOR SUBLOOPS

Under Section 9.3 of the FTTH Agreement, Qwest offers CLECs access to subloop unbundling such that CLECs can obtain access to portions of an unbundled loop at any Qwest accessible terminal, where Qwest owns and

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[49] This category includes: 2-wire and 4-wire non-loaded loops, ADSL compatible loops, ISDN-BRI loops, and xDSL-I loops.

[50] This category includes: DS-1 and DS-3 capable loops and OCn loops.

maintains the wiring. Two witnesses commented on issues associated with subloop unbundling: Mr. Wilson, on behalf of AT&T, and Mr. Price, on behalf of WorldCom. Because Mr. Price's subloop issue is tied to remote DSLAM deployment and packet switching, his concerns will be addresses by Ms. Stewart. I will address the issues raised Mr. Wilson.

However, before addressing the subloop issues raised by AT&T, it is necessary to frame the discussion for Minnesota. Qwest operates in Minnesota under Minimum Point of Presence (MPOP) rules.[51] In Minnesota, the end user owns and controls all wiring from the customer side of the MTE Terminal or NID, except in three situations: trailer parks, marinas, and the airport. Ms. Stewart's direct affidavit discusses the Qwest position to access subloop under all situations. In Minnesota, except for the three situations mentioned above, CLECs are able to access the MTE without contacting Qwest to determine who owns the wire on the customer side. Therefore in the vast majority of situations in Minnesota, subloops do not exist beyond the NID. Based on the subloop discussions in other jurisdictions, AT&T's primary concern regarding sub-loops focused on sub-loops past the NID. Nonetheless, for the benefit of this Commission, Qwest will respond to AT&T's subloop issues.

After proceedings on this subject in multiple states, Qwest and the CLEC community have reached consensus on how CLECs should access subloop elements in detached terminals, such as a feeder distribution interface ("FDI").

The issues that remain concern how CLECs can access subloops and terminals in multiple tenant environments ("MTEs"). AT&T wants access without any rule or limitation. Qwest asserts that CLECs must follow some minimal access procedures. I will first address AT&T's testimony on subloops.

a. Subloop Access at MTE Terminals

The first issue AT&T raises involves whether Qwest's contractual provisions relating to subloop access are consistent with the FCC's definition. In Minnesota, which is an MPOP state this issue is moot except for marinas, trailer parks and the airport. Notwithstanding the Minnesota situation, it appears AT&T is raising an issue that is an unnecessary hold over from the time when Qwest demanded collocation in MTE terminals. The FTTH interconnection agreement allows CLECs to access NIDs (terminals without a subloop element) and MTE terminals (when subloop access is required) in exactly the same way. Despite this, AT&T contends that any accessible terminal containing a protector in an MTE is a NID and subject to the FCC's rules on access to the unbundled NID. This position appears to be in direct opposition to Mr. Wilson's own testimony regarding unbundled loops.[52] Mr. Wilson uses various FCC cites to define the local loop. Then Mr. Wilson states: "In addition, the FCC concluded that defining the loop termination point as the demarcation point is preferable to the NID 'because in some cases, the NID does not mark the end of the incumbent's

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[51] Minnesota Exchange and Network Services Tariff – Section 2.1.1.

[52] Wilson Checklist Items 4 and 11 Affidavit at pages 4 and 5.

control of the loop facility.[53]'" To the extent that an unbundled loop extends to the demarcation, so does a subloop.

AT&T's complaint is simply a terminology issue, nothing more. There is no difference in what access CLECs will obtain. Although AT&T asserts that Qwest has "encumbered" access to MTE terminals,[54] it presents no evidence supporting its position that the mere definition used in Qwest's contractual documents has ever impeded AT&T's access to an MTE in Minnesota. Indeed, as of May 31, 2002, Qwest has in service 69 subloops, none of which are in Minnesota. AT&T's sole issue is what to call these terminals when they are a stand-alone product (a NID) versus terminals with an accompanying subloop (an MTE Terminal). The terminals should have different names to leave absolutely no confusion about whether access to a subloop is involved. When an MTE Terminal is involved, a Qwest subloop exists past the terminal, and the CLEC also wants access to a Qwest subloop past the terminal. When the CLEC orders a NID, the NID itself is the only portion of the Qwest network to which the CLEC seeks access. Generally, this would mean that the NID is a demarcation point between the Qwest network and customer-owned inside wire.

In making its arguments, AT&T cites to Rule 319(a)(2)(D), 47 C.F.R. § 319(a)(2)(D), that provides "[a]ccess to the subloop is subject to the Commission's collocation rules." To avoid the application of the collocation rules,

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53 UNE Remand at ¶ 168.

54 Wilson Emerging Services Affidavit at 9.

AT&T claims that the accessible terminals it seeks to access in conjunction with subloop elements constitute unbundled NIDs and, therefore, are not subject to the collocation rules. However, Qwest does not seek to require CLECs to collocate in either NIDs or MTE Terminals to obtain subloop unbundling. Section 9.3.3.1 of the FTTH agreement specifically states that no such collocation is required.

> 9.3.3.1 Access to Distribution Loops or Intra-building Cable Loops at an MTE Terminal within a non-Qwest owned MTE is done through an MTE-POI. Remote Collocation is not necessary because CLEC can access the Subloop without placing facilities in a Qwest Premises.

The crux of the purported disagreement between AT&T and Qwest turns on the FCC's description of these two UNEs – subloop and NID. Essentially, AT&T claims that any accessible terminal that includes the cross-connect and electrical over-voltage protections that a NID performs constitutes a NID to which Qwest must provide unbundled access pursuant to Rule 319(b). This contention ignores the FCC's plain distinction between the functionality of the NID, which the FCC expressly held is included as part of a subloop, and the unbundled network element NID, which the FCC clearly defined as the demarcation point between "end-user customer premises wiring [and] the incumbent LEC's distribution plant."[55] Thus, all Qwest is stating is that CLECs must order subloops pursuant to subloop contractual provisions (Section 9.3 of the FTTH agreement) and NIDs

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[55] *UNE Remand Order* ¶ 233.

pursuant to NID contractual provisions (Section 9.5 of the FTTH agreement). The processes involved have much agreed-upon overlap, but the differences required for subloop access are necessary to ensure Qwest can monitor, repair, and bill for its subloop elements.

In the Multi-State workshops, the Multi-State Facilitator considered this issue in the Third Report on Emerging Services.[56] The Multi-State Facilitator determined that Qwest's treatment of NIDs and MTE terminals was appropriate and determined that agreement language should be flexible enough to allow a case-by-case assessment of "accessible" terminal by subloop elements.[57] Qwest agrees with this recommendation. Qwest's interconnection agreement with FTTH reflects this flexibility. This Commission should find that Qwest meets its obligations to provide access to subloops at MTE terminals.

b. MTE Access Protocol

Despite months of negotiating terms of a standard protocol for access to MTEs, a process in which Qwest adopted virtually all of AT&T's recommended revisions, AT&T still raises minor issues with the MTE Access Protocol which it alleges leaves it "extremely concerned."[58] Qwest is confused by AT&T's expressed "concerns." First, attached hereto as Exhibit DP-LOOP-10 are excerpts from the Washington Workshop 4 transcript in which it is clear that

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56 Exhibit DP-LOOP-23 at page 27-30 addresses this Multi-state impasse issue.

57 Id. at 29-30.

58 Wilson Emerging Services Affidavit at 9.

AT&T and Qwest resolved virtually all issues surrounding the MTE Access Protocol. Second, Mr. Wilson attached to his testimony Version 3 of the Standard MTE Access Protocol that incorporates recommendations of Chairman Gifford in Colorado. Recently, in South Dakota, Mr. Wilson stated that Chairman Gifford "addressed many of AT&T's issues related to the access protocol" and that adoption of his required language would be "appropriate."[59] Thus, AT&T has already acknowledged that Version 3 of the Access Protocol is "appropriate." Given this acknowledgement, AT&T's so-called concerns regarding Version 3 of the MTE Access Protocol should be ignored. Qwest stands ready to use Version 3 of the MTE Access Protocol in Minnesota.

Regardless, AT&T's attacks on the MTE Access Protocol are meritless and do not rise to any level that would affect Qwest's compliance with Section 271.[60] For example, Mr. Wilson complains that the 66 and 76 type terminal blocks are the only terminal blocks identified by in the Protocol.[61] The reason these are singled out is that they constitute the vast majority of all terminals in use by Qwest. Although other types of terminal blocks are in use, they are not in any significant quantities. Therefore, it would be uneconomical for Qwest to

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59 AT&T's Verified Comments on Emerging Services in South Dakota at page 11.

60 The FTTH Agreement permits a CLEC to negotiate its own access protocol if it does not wish to use the standard MTE access protocol. FTTH Agreement, § 9.3.5.4.5.1.

61 Wilson Emerging Services Affidavit at 11.

develop standardized processes for access to all types of blocks when CLECs would rarely encounter them.

Mr. Wilson also states that "Qwest has given itself the unilateral ability to place a single point of interconnection (SPOI) instead of allowing the CLECs direct access to the NID for Options 1-3."[62] The Protocol states, “Terminal technology and/or subloop volume may necessitate placement or re-placement or a cross-connect field to serve as a single point of interconnection (SPOI).” However, Qwest would only establish a SPOI if direct access was not possible.

c. Requiring Local Service Requests (LSRs) for Access to Premise Wiring at MTEs

AT&T’s second subloop issue in an MTE environment is whether CLECs must order subloops using the standard LSR process. AT&T contends that it should not be required to use an LSR even though it has acknowledged that use of an LSR is appropriate for almost all aspects of subloop unbundling.

Mr. Wilson expends much effort to discuss issues that are not relevant in this state. His references to situations present in other states are not applicable because those states are governed by a different tariff, namely the Cable Wire Service Termination Policy ("CWSTP"). Mr. Wilson is apparently unaware that Minnesota is a "MPOP" state, meaning that in Minnesota, Qwest does not own the intra-building cable, simple or complex inside wiring or on premises cable, except in very limited cases as defined by the Minnesota Exchange and Network

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62 Id. at 12.

Services Tariff. Thus, options 2 and 3 of the CWSTP are not virtually inapplicable in this state. Because Qwest does not own intra-building cable, Mr. Wilson's argument around CLEC submission of LSRs for on-premises wiring is moot. Although LSRs are generally required for ordering subloops, CLECs will only have to submit LSRs in a relatively few instances -- namely trailer parks, marinas, and the airport. In all other situations, CLECs must negotiate this issue with the building owner.

Regardless of the rarity of occurrences for Minnesota, it is important to note that virtually all state commissions in Qwest's region have rejected AT&T's arguments. In the Multi-State workshops, the Facilitator discounted the AT&T suggestion to have CLECs avoid a standard LSR process by sending in monthly counts to Qwest.[63] Every state commission, except Oregon, has specifically required use of the LSR. Qwest notes that in making its recommendation, the Oregon Commission relied upon a recommendation of the Washington Administrative Law Judge. The Washington Commission, however, declined to follow that recommendation, and, accordingly, it decided the issue consistent with the decisions of the other 11 states that have addressed it to date.[64] Upon

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[63] Exhibit DP-LOOP-23 at 31.

[64] 28th Supplemental Order; Commission Order Addressing Workshop Four Issues: Checklist Item No. 4 (Loops), Emerging Services, General Terms and Conditions, Public Interest, Track A, and Section 272, *Investigation into U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996; U S WEST Communications, Inc's Statement of Generally Available Terms Pursuant to Section 252(f) of the Telecommunications Act of 1996*, Dockets UT-003022, UT 003040, at 28-

AT&T's request for reconsideration of this ruling, the Washington Commission reaffirmed its decision that requiring LSRs for subloops was reasonable: "We find it reasonable for Qwest to require an LSR for an order, even if it is for such a small item as a inside wire subloop. We also find it reasonable for Qwest to have consistent ordering practices across its region to allow its employees to more efficiently provide service."[65]

In rejecting this proposal, the Multi-State Facilitator determined:

> AT&T's arguments about the low cost and the low incidence of repair for on-premises wiring does not support its proposed long-term solution. Because Qwest is entitled to bill for the wiring if it owns it, it is also entitled to regularity and completeness for billing purposes. LSRs provide an efficient means of getting Qwest's billing systems the information needed; comparable manual methods would not be efficient; and AT&T's solution is simply not rigorous enough to offer Qwest what it is entitled to have when it makes its facilities available for CLEC use as subloop elements.[66]

The Multi-State Facilitator also addressed the timing concerns of the CLECs in having to have complete LSRs the first time they access an MTE location. To address that issue, Qwest agreed to implement the Facilitator's recommendation that Qwest allow CLECs to submit incomplete LSRs the first

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29 (WUTC Mar. 12, 2002). Qwest has filed comments in Oregon asking for review of this issue in light of the Washington Commission's determination.

65 31st Supplemental Order; Order Granting Qwest's Petition for Reconsideration of the 24th Supplemental Order and Granting and Denying Petitions for Reconsideration of the 28th Supplemental Order, *Investigation into U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996; U S WEST Communications, Inc's Statement of Generally Available Terms Pursuant to Section 252(f) of the Telecommunications Act of 1996*, Dockets UT-003022, UT 003040, at 11 (WUTC Apr. 12, 2002).

time the CLEC accesses Qwest subloop elements at an MTE. However, as stated earlier, because Minnesota is a MPOP state, the claims made by Mr. Wilson are essentially moot.

d. CLEC Facility Inventories

Because Minnesota is an MPOP state AT&T's complaints regarding CLEC facility inventories is also moot. In other states, Qwest is responsible for creating an inventory (not the CLEC) to track CLEC usage of Qwest-owned intra-building cable. However, since Qwest does not own intra-building cable in Minnesota, there is no inventory issue.

e. Availability of All Subloop Types

Mr. Wilson claims that Qwest does not make all subloop varieties available to CLECs. This is plainly incorrect. Qwest's agreement with FTTH specifies four subloop types as the "standard" subloop offerings.[67] Qwest notes that CLECs have in service only 69 subloops in Qwest's 14-state region, all requested by CLECs from the standard subloop categories. [However, in addition to these standard subloop varieties, Qwest has already committed to provide additional subloop varieties pursuant to Qwest's Special Request Process. This is explicitly stated in Section 9.3.1.7 of the FTTH agreement. Thus, Mr. Wilson is incorrect when he states that Qwest does not offer the

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66 Exhibit DP-LOOP-23 at 31.

67 FTTH Agreement, § 9.3.1.2.

additional types of subloops he identifies in his testimony. Qwest clearly does under the FTTH agreement.

In addition, AT&T has acknowledged in other proceedings that use of the Special Request Process for these subloop types is appropriate. For example, in the Washington workshops, AT&T agreed that additional subloops not expressly identified in the Washington SGAT could be made available through the Special Request Process, and that this agreement should memorialized in Section 9.3.1.7.[68] This same language appears in the FTTH agreement in Minnesota. In Colorado, AT&T also agreed with this resolution. Indeed, there Mr. Wilson stated that AT&T believed the SRP process was appropriate for copper feeder because it is an "an infrastructure kind of a subloop element. It's not something immediately needed for a . . . particular customer or end-user."[69] Thus, AT&T has already acknowledged that use of the Special Request Process for additional subloop access is appropriate.[70]

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[68] Exhibit DP-LOOP-24 (Washington Workshop Tr. Vol. XXXII at 4674-75).

[69] Exhibit DP-LOOP-25 (Colorado Tr. 4/20/01 at 106-09).

[70] I am troubled, however, by the manner in which AT&T is proposing to utilize and portrays the use of these new “parts” of the subloop elements. In Wyoming, for instance, Mr. Wilson provided an illustrative diagram depicting a fiber route to a remote terminal and the facilities extending from the remote terminal to a feeder distribution interfaced. He used this diagram to demonstrate the piece of the network that, in this case, a CLEC would potentially want to use. When asked by one of the Commissioners if his proposal would strand Qwest facilities, Mr. Wilson stated that facilities would not be stranded. However, it was apparent from Mr. Wilson's explanation and the drawing that facilities were indeed stranded with little or no functionality remaining for either Qwest or CLEC use in the future. The Wyoming Commission apparently agreed and dismissed this issue.

Beyond this prior consensus, Qwest notes that the demand for the additional types of subloop that Mr. Wilson identifies is extremely low if not non-existent. It makes no sense for Qwest to develop standardized processes for subloop products with little, if any demand. The Special Request Process, which itself was negotiated during the course of 271 workshops in numerous states, is an appropriate vehicle to address these infrequently requested subloop types.

V. ISSUES RAISED REGARDING QWEST'S COMPLIANCE WITH THE FCC'S REQUIREMENTS FOR NIDS

a. NID Access

Qwest provides nondiscriminatory access to the Network Interface Device ("NID"). Qwest allows requesting CLECs to connect their own loop facilities to on-premises wiring through Qwest's NID or at any other technically feasible point. Pursuant to Section 9.5 of the FTTH Agreement, Qwest has a concrete and specific legal obligation to provide CLECs with access to unbundled NIDs. Qwest makes these provisions available to all CLECs whose interconnection agreement includes NIDs. Qwest provides access to NIDs of all types on a stand-alone basis or as part of its unbundled loop and subloop offerings. The FCC defines the NID network element as "any means of interconnection of end-user customer premises wiring to the incumbent LEC's distribution plant, such as a cross connect device used for that purpose."[71] In the UNE Remand Order, the

[71] 47 C.F.R. § 51.319 (b).

FCC clarified that when a CLEC receives an unbundled NID from Qwest, it includes "all the features, functions, and capabilities of the facilities used to connect the loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism."[72]

Qwest's NID policy, as presented in Section 9.5 of the FTTH Agreement is in full compliance with FCC rulings. CLECs have three ways to obtain access to a NID – in conjunction with an unbundled loop; with a subloop; or as a stand-alone NID. In all situations, CLECs have access to all the features, functionalities, and capabilities of the NID. If a CLEC seeks to access a NID as well as a subloop connected to the NID, it may do so only pursuant to subloop procedures discussed in the Emerging Services Affidavit of Ms. Karen A. Stewart.[73]

b. NID Security

Mr. Wilson makes reference to a time in 2000 when Qwest was padlocking NIDs.[74] This is not and has never been a Qwest policy. The 2000 situation in Washington was an isolated local practice instituted to prevent AT&T from breaking into the boxes. Qwest's NID policy not only provides CLECs with access to the NIDs, but it also allows the CLECs to perform their own wiring at the Qwest NID. Although the Qwest policy does not include padlocking the NID, it is possible for a CLEC to encounter a locked NID. In most instances, these

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72 *UNE Remand Order*, ¶ 233.

73 Affidavit of Karen A. Stewart, January 16, 2002 at p. 20 - 22

devices are placed either by the end user, in the case of stand-alone NID on single family dwelling units or in an MTE environment by a security company or the property management company itself. Usually, they are placed in order to reduce the amount of unauthorized access occurring by tenants and outside vendors. In my vast experience as an I&M Technician, there were limited instances where the property owner requested that Qwest place padlocks on a terminal as a result of recurring instances of vandalism. In these cases, however, the property owner retains the key or combination to access the terminal, and it is available to the service provider by either calling or visiting a suite or management office within the complex. This is no different than an owner of a multi-tenant dwelling locking the door to the telephone terminal room in order to guard against unauthorized entry or to keep tenants from altering the current configuration.

While researching this issue, Qwest uncovered a letter dated October 26, 2000 from Timothy D. Boykin, District Manager of AT&T's Carrier Marketing, to Qwest's Wholesale Account Manager Mark Miller notifying Qwest of the combinations of padlocks that AT&T had placed at 4 or 5 locations in Colorado.[75] It is surprising, therefore, that AT&T raises this isolated, dated and resolved issue when AT&T itself has padlocked terminals.

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[74] Emerging Services Affidavit of Mr. Wilson at 4.

[75] Confidential Exhibit DP-LOOP-C26.

c. Removal of Qwest Facilities from the NID

In the Washington 271 workshops, Mr. Wilson produced an outdated excerpt from a 1969 Bell System Practice showing the removal of an aerial drop from porcelain protector, clearing the ends and tying it back on itself. This document was published long before AT&T's divestiture at a time when AT&T was the sole provider of telecommunications in the country.[76] Mr. Wilson relies upon Section 3.01 and 3.02 of this outdated document as the basis for his argument that AT&T should be allowed to remove a Qwest drop from a Qwest NID, let the Qwest facility dangle in mid-air, thereby giving AT&T space to terminate its drop. Mr. Wilson did not differentiate between an aerial or buried drop, although his example only depicted an aerial drop.

Mr. Wilson ignores, however, that the practice cited in Section 3.01 and 3.02 dealt specifically with a scenario in which the entire protector (NID) was being removed from the house. In that same document Section 2.01 states the following: "Where station protector or connecting block is not to be removed, do not disconnect the outside drop at the customer building."

Based on Mr. Wilson's own Bellcore document, the Qwest drop should be left in place and not removed from the NID to make room for the CLEC drop. The drop should remain terminated in order to provide over-voltage protection in case of the accidental introduction of additional voltage into the circuit. If space

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[76] Exhibit DP-Loop–11 is a copy of practice Mr. Wilson refers to in his affidavit.

is available in the Qwest NID, the CLEC is able to use the remaining capacity to terminate its drop.

Protection is further discussed in another exhibit AT&T cited in the same Washington Workshop, AT&T Exhibit 407, which is included in Exhibit DP-LOOP-11. In chapter 8, section C, subsection 800-30, Protective Devices, of this exhibit it states:

> A listed primary protector shall be provided on each circuit run partly or entirely in aerial wire or aerial cable not confined with a block. Also, a listed primary protector shall be provided on each circuit, aerial or underground, located within the block containing the building served so as to be exposed to accidental contact with electric light or power conductors operating at over 300 volts to ground. In addition, where there exists a lightning exposure, each inter-building circuit on a premises shall be protected by a listed primary protector at each end of the inter-building circuit. Installation of primary protectors shall also comply with Section 110-3(b).

Thus, the documents AT&T relies upon do not support its position.

d. Access Protocol

Qwest's Standard Multi Tenant Environment (MTE) Terminal Access Protocol provides CLECs with direct access to its multi-tenant environment (MTE) terminals, see Exhibit DP LOOP-12. Direct access to Qwest MTE terminals is provided for the purpose of accessing wire owned by Qwest. However, as stated earlier in this affidavit, Minnesota is a MPOP state and as such, Qwest does not own, except in very limited instances, simple or complex inside wiring or on premises cable. CLEC in the State of Minnesota requiring

access to inside wire will have to make such arrangements with the owner of facilities extending beyond the Qwest demarcation point.

e. Minnesota as a MPOP State

As discussed at length in the subloop section of my testimony, Minnesota is an MPOP state. As a result, the majority of Mr. Wilson's testimony is irrelevant. Because Qwest does not own premises wire, CLECs have no need to inquire of Qwest of wire ownership and no need to submit a LSR for inventory or billing purposes. Instead, because Qwest does not own Simple, Complex or on-premises wiring past the demarcation point (except in the three limited circumstances discussed above), AT&T and other Minnesota CLECs need to approach and negotiate with the property owner, not Qwest, regarding access.

f. NID activity in Minnesota

Qwest complies with the NID requirements in Section 271 (c)(2)(B)(iv) of the 1996 Telecommunications Act and provides nondiscriminatory access to features, functions and capabilities of the NID to CLECs across the state of Minnesota. In Minnesota, Qwest has provisioned 81,768 NIDs, all in conjunction with unbundled loops, affording Minnesota CLECs a meaningful opportunity to compete. To date, no Minnesota CLEC has requested access to a stand-alone NID. However, Qwest stands ready to meet any requests that are made. This Commission should find that Qwest satisfies this aspect of checklist item 4.

VI. CONCLUSION OF TESTIMONY

The issues raised by intervenors should be resolved in Qwest's favor. For the reasons set forth above and in the Qwest affidavits filed by Ms. Liston and Ms. Stewart, the Minnesota Public Utilities Commission should recommend that Qwest complies with the requirements of checklist items 2 and 4 as they relate to subloops, unbundled loops, and NIDs.